UTILITY PATENT APPLICATION TRANSMITTAL
(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No.   : 40985/DMC/C685
Inventor(s)   : Michael L. Obradovich
Title   : SYSTEM AND METHOD FOR USER NAVIGATION
Express Mail Label No. : EL521382003US

ADDRESS TO: Assistant Commissioner for Patents
Box Patent Application
Washington, D.C. 20231   Date: October 27, 2000

1. __X__   **FEE TRANSMITTAL FORM** *(Submit an original, and a duplicate for fee processing).*

2. **IF A CONTINUING APPLICATION**
    ____   This application is a of patent application No. .

    Prior application information: Examiner ; Group Art Unit:

    __X__   This application claims priority pursuant to 35 U.S.C. §119(e) and 37 CFR §1.78(a)(4),
    to provisional Application No. 60/161,860, Filed October 27, 1999.

3. **APPLICATION COMPRISED OF**

    Specification
    __16__   Specification, claims and Abstract (total pages)

    Drawings
    __16__   Sheets of formal drawing(s) (FIGS. 1 to 15)

    Declaration and Power of Attorney
    ____   Newly executed
    __X__   Unexecuted declaration
    ____   Copy from a prior application (37 CFR 1.63(d))(for continuation and divisional)

4. ____   **Microfiche Computer Program** *(Appendix)*

5. ____   **Nucleotide and/or Amino Acid Sequence Submission** *(if applicable, all necessary)*
    ____   Computer Readable Copy
    ____   Paper Copy (identical to computer copy)
    ____   Statement verifying identity of above copies

6. **ALSO ENCLOSED ARE**
    ____   Preliminary Amendment
    ____   A Petition for Extension of Time for the parent application and the required fee are
    enclosed as separate papers
    ____   Small Entity Statement(s)
    　　　 ____   Statement filed in parent application, status still proper and desired
    　　　 ____   Copy of Statement filed in provisional application, status still proper and desired

____ An Assignment of the invention with the Recordation Cover Sheet and the recordation fee are enclosed as separate papers

____ This application is owned by pursuant to an Assignment recorded at Reel , Frame

____ Information Disclosure Statement (IDS)/PTO-1449

    ____ Copies of IDS Citations

____ Certified copy of Priority Document(s) *(if foreign priority is claimed)*

____ English Translation Document *(if applicable)*

__X__ Return Receipt Postcard (MPEP 503) (should be specifically itemized).

____ Other

7. **CORRESPONDENCE ADDRESS**

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FEE TRANSMITTAL
UTILITY PATENT APPLICATION

DATE: **October 27, 2000**

Docket No.   :   40985/DMC/C685
Inventor(s) :   Michael L. Obradovich
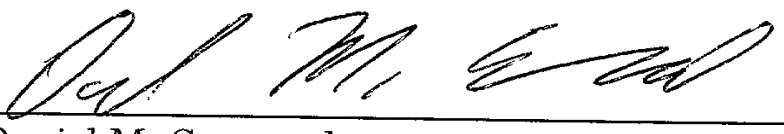Title   :   SYSTEM AND METHOD FOR USER NAVIGATION

FEE DETERMINATION

CLAIMS AS FILED					
	NUMBER FILED	NUMBER EXTRA	SMALL ENTITY RATE	LARGE ENTITY RATE	FEE
TOTAL CLAIMS	21 – 20	1	1 x $9.00	x $18.00	$9.00
INDEPENDENT CLAIMS	5 – 3	2	2 x $40.00	x $80.00	$80.00
MULTIPLE-DEPENDENT CLAIMS FEE			$135.00	$270.00	$0.00
BASIC FEE			$355.00	$710.00	$355.00
				TOTAL FILING FEE	$444.00
List Independent Claims: 1, 11, 19, 20, 21					

METHOD OF PAYMENT

__X__   No filing fee enclosed

__X__   No Deposit Account Authorization.

Respectfully submitted,

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PLG PAS282461 1-*-10/27/00 7 45 PM

1   SYSTEM AND METHOD FOR USER NAVIGATION

CROSS-REFERENCE TO RELATED APPLICATIONS

         This application claims the benefit of U.S. Provisional

5   Application No. 60/161,860, filed October 27, 1999, the

disclosure of which is incorporated by reference.

BACKGROUND OF THE INVENTION

         This invention relates generally to navigation assistance

10   devices, and more particularly to personalized computer-based

electronic navigation devices.

         Individual computers and computerized devices are able to

store large amounts of information. With the advent of the

Internet and the World Wide Web, a single computer may access

15   information stored in a number physically separated computers

using the Internet. With the proliferation of use of the

Internet, numerous people, organizations, and entities have made

information available to computer users. Many individuals have

their own Web pages, and use their Web pages to present

20   information of interest to them. Many organizations and entities

similarly have Web pages describing their organization, purpose,

and other information. Thus, individuals are able to access

information about a variety of topics, presented by a variety of

individuals and entities.

25   In addition, businesses are often supplementing this

physical presence by placing information about their goods,

services and products on the Web. Indeed many such businesses

are solely Web-based. That is, some businesses may not provide

a physical location which a customer or shopper may visit, but

30   instead merely provide a presence on the Web for consumers to

access via the Internet. Many businesses, however, combine a

physical presence, such as a store site, with information about

the store on the Web. Thus, computer users can determine the

products, pricing, and other information relating to a store on

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1   the Web, and determine whether the consumer is interested in
     visiting the store and thereafter visiting the store.

         Often the consumer is assisted in visiting the physical
     location of a store by receiving instructions over the Web as to
5   how to, for example, drive to the location. Mapping services
     available from the Web, upon input of a desired destination and
     a current location, provide driving instructions as to how to get
     from a current destination to a desired location. Thus, it would
     appear that the Web provides a convenient way to learn about
10   physical locations, such as stores, and how to get to those
     locations.

         As discussed above, the amount of information available over
     the Web, is tremendous. The shear quantity of data available,
     however, also increases the difficulty in finding data desired
15   by a consumer. Determining which data meets the needs of the
     consumer, as well as convenient presentation of such data,
     provides difficulties. Moreover, even for categories of
     information which appear to fit a consumer's need, some otherwise
     relevant data may not be desired by the consumer. For example,
20   for certain types of goods a consumer may not wish to frequent
     a particular establishment, or desire to only frequent a few of
     a large number of establishments. Thus, a consumer may be
     presented with data from establishments the consumer has no
     desire to visit, and such information merely clutters the user's
25   ability to rapidly locate information of interest.

         Further, any one consumer may have a variety of interests.
     Such a consumer may not wish the information relevant to one
     aspect of the consumer's activities cluttering up requests for
     information regarding other aspects of the user's activities.
30   In addition, businesses desiring to place information
     regarding their business before certain types of consumers have
     no convenient way to do so. Businesses do not desire to place
     information before consumers who have no interest in their
     business, and that do wish to place information regarding their
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1   business before consumers who do or are likely to have an
     interest in the goods the business provides.

         In addition, although consumers may be provided information
     on how to get to a business, while enroute the consumers receive
5   no additional information about points of interest which they may
     be passing. In addition, consumers may realize, while in route,
     that they have a need to obtain other goods or services along the
     route. Such consumers may not have detailed information
     concerning their present location, and no convenient means to
10   determine the availability of businesses stocking goods which
     they desire or need enroute, or how to reach such businesses.

SUMMARY OF THE INVENTION

         In one aspect, the present invention provides a real world
15   navigation system. In one embodiment the invention comprises a
     method of populating a database, including determining a tag
     location, requesting information concerning the tag location and
     providing the information to a computer system.   In one
     embodiment determining the tag location comprises evaluating the
20   position of a GPS capable device, waiting a preselected time
     period, reevaluating the position of the GPS capable device, and
     determining if the position has changed. In another embodiment,
     determining the tag location comprises presenting a map display
     using a computer to a user and receiving a selected position on
25   the map display.

         In alternative embodiments the tag location comprises a
     plurality of locations, and in one embodiment these locations are
     selected area and in another embodiment the locations are a route
     to a destination.

30   In other embodiments, the invention comprises a method of
     accessing a database using a profile. The profile comprises
     information applicable to a user, and serves as a filter between
     the database of information and the display to the user. In
     other embodiments, the profile is used in a push mode to push
35   information desired by the user to the user, in other embodiments

1   the profile serves as a filter in a pull mode pulling only
    information applicable to the user to the user.

        In yet another embodiment the invention comprises an
    entertainment distribution system. The entertainment distribution
5   system comprises an entertainment server receiving entertainment
    related computer files in a variety of formats. The entertainment
    computer related files are sequenced and organized by a user, and
    may thereafter request from requesting nodes various files or
    sequences of files in a format applicable to their requesting
10 node.

        These and other aspects of the present invention will be
    more readily understood when considered in connection with the
    drawings and the following detailed description.

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    BRIEF DESCRIPTION OF THE DRAWINGS
        FIG. 1 illustrates a block diagram of a system of the
    present invention;
        FIG. 2A illustrates a block diagram showing user interaction
20 with a database of the present invention;
        FIG. 2B illustrates a block diagram of an embodiment of a
    database of FIG. 2A;
        FIG. 3 illustrates a flow diagram of a process of forming
    profiles to interact with the database of FIG. 2;
25   FIG. 4 illustrates a flow diagram of a process of creating
    profiles;
        FIG. 5 illustrates an input screen for creating a profile;
        FIG. 6 illustrates an input screen for selecting a default
    profile;
30   FIG. 7 illustrates an input screen for cloning a profile;
        FIG. 8 illustrates input screen for editing a profile;
        FIG. 9 illustrates a flow diagram of a process for
    populating a database;
        FIG. 10 illustrates a navigation screen;
35   FIG. 11 illustrates a roadblocks screen;

1   FIG. 12 illustrates an enroute profile settings screen;

           FIG. 13 illustrates a tag location screen;

           FIG. 14 illustrates a block diagram of an entertainment
    distribution system; and

5   FIG. 15 illustrates a process conducted by the entertainment
    distribution system of FIG. 14.

    DETAILED DESCRIPTION

           FIG. 1 illustrates a block diagram of a system of the
10   present invention.   An Internet service provider (ISP) 11,
    including a server, is linked to a user personal computer 13 via
    telephone lines 15.   In actuality, one or more computer units may
    be interdisposed between the PC and the server, with the server
    being a node on the Internet.   The server is also connected via
15   communication link to a personal computer device 17.   Circuitry
    to allow the PCD, sometimes in conjunction with external elements
    or computers, to determine the position of the PCD.   For example,
    in one embodiment the PCD contains circuitry for receiving GPS
    signals and passing pertinent representations of the received
20   signals to a base server for further processing.   The base
    server, in turn, calculates the position of the PCD and transmits
    the position information to the PCD.   Alternatively, the PCD
    contains a GPS receiver and processing system, and the PCD
    determines its position using the GPS receiver and processing
25   system.   In one embodiment, the personal computer device is a PCD
    of the type disclosed in U.S. Patent Application No. 08/879,955,
    the disclosure of which is incorporated herein by reference.

           The server includes a database. The database includes
    information pertaining to a variety of topics. More specifically,
30   in one embodiment the database includes information relating to
    locations. That is, the database includes information regarding
    specific locations, as well as information pertaining to
    transportation to and from these locations.

           The information in the database is provided by businesses,
35   individuals, and users of PCDs.   Thus, the database contains

1   general information provided by businesses, stores, and other
     commercial entities who wish to make information concerning their
     business available to others. The database also contains
     personalized information regarding points of interest and other
5   matters provided by users of PCDs. The database therefore
     provides a source of information to the users of PCDs.

     In accordance with the present invention, therefore, users
     are provided profiles to assist on the search of the database.
     This is shown in block diagram form in FIG. 2A. As illustrated
10   in FIG. 2A, a first user 31 accesses a database 33 using a first
     profile 35. The profile includes information pertaining to the
     user. For example, the profile may contain information relating
     to restaurants the user prefers, businesses the user prefers to
     frequent, locations that the user desires to reach, or routes the
15   user has marked an interest or other matters.

     In effect, the profile serves as a filter between the
     database and the user. The information retrieved from the
     database that the users request is provided to the user based on
     aspects the user has entered into the profile.

20   The user may utilize more than one profile. This is
     illustrated by a second user 37. The second user accesses the
     database using a second profile 36 and a third profile 41. The
     second profile is similar to the first profile in that the second
     profile contains information pertaining to the specific user. The
25   third profile differs in that the third profile is a standard
     profile. In other words, the third profile is a standardized
     profile made available for selection by users so that users may
     avoid the necessity of creating their own profile.

     The use of multiple profiles is beneficial in that users
30   may, depending on their activities, require different information
     of a different nature at different times. For example, a user may
     desire information of a first type relating to the users business
     activities. This may be due to the user working at a locale,
     with the result that the user desires information pertaining to
35   the region of the locale while at work. In addition, the user

                                    -6-

1   may frequent certain types of businesses as part of work related activities, whereas the user may frequent different types of businesses during the user's leisure hours.

   In addition, profiles may be copied. Copying of profiles
5   is beneficial as the copied profile may be thereafter edited or added to, or have other operations under the profile. A user having a copied profile is illustrated by a third user 41. The third user accesses the database using a fourth profile 47, a fifth profile 45 and a copied sixth profile 43. The fourth and
10   fifth profiles are, like the profiles of the first and second users, profiles pertaining to the individual user. The copied sixth profile of the third user is a copied version of the fifth profile. When created, therefore, the sixth profile is merely a copy of the fifth profile. Over time, however, the user may
15   adjust and adapt the copied profile to suit other needs. This allows the user to use the information contained in the original profile, but allows modification to meet specific needs of the user.

   FIG. 2B illustrates a data layout of one implementation of
20   a database in accordance with the present invention. The database 21 includes plurality of memory elements. The plurality of memory elements includes subgroupings of memory elements. A three such subgrouping of memory elements are illustrated as a first subgrouping 23, a second subgrouping 25, and a third subgrouping
25   27. As illustrated in FIG. 2B, the first, second, and third subgroupings of memory correspond to areas of memory reserved for information for the first profile, second profile, and third profiles illustrated in FIG. 2A. Thus, in the embodiment illustrated in FIG. 2B, data is stored separately for each
30   profile. Thus, the profiles serve as a filter into a database, namely, information relevant to a users profile is placed into the database at the request of the user. A request by the user in one embodiment includes implied requests based on profile settings provided by the user. Thus, if the user, for example,
35   has indicated a particular store as a favorite, information

1   regarding the store may be placed in the user's profiles section
       of the database without an explicit command by the user.

            In an alternate embodiment, the database is more
       conventionally set up in which a record for each data element
5   indicates whether the data item is applicable to a particular
       profile. In further embodiments of the database, data is sorted
       in real time based on user profile requests, and no explicit link
       between the profile and the data in the database is provided
       except upon a request.

10   FIG. 3 illustrates a flow diagram of a process of creating
       and populating a profile. In Block 61 the user creates a
       profile. As discussed above, the profile may be a user specific
       profile, a standard profile, or a copied profile. In Block 63 the
       user populates the profile. Populating the profile is analogous
15   to populating a database linked to the profile. Indeed, in one
       embodiment of the invention populating the profile is population
       of a unique database linked to the profile. In other
       embodiments, however, populating the profile involves linking
       information in a database to the profile, as well as, in some
20   embodiments, providing information to the database.

            FIG. 4 illustrates details of a flow diagram of a process
       of creating a profile. In Block 101 the user selects a type of
       profile. The user may select a new profile, a preselected
       profile, a clone profile, or edit of an existing profile. If the
25   user selects a new profile the process displays a create new
       profile screen in Block 102. The create new profile screen is
       illustrated in FIG. 5. As illustrated in FIG. 5, the create new
       profile screen includes data entry regions for personal data 51,
       data entry areas for enroute profiles 53, and data entry areas
30   for favorites 55. Accordingly, in Block 103 of the process of
       FIG. 4, the user enters personal data information requested by
       the create new profile screen. The personal data includes a
       profile name, the age of the user, the sex of the user, and the
       marital status of the user. The personal data additionally

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1   includes the occupation of the user, the city of the user, as
well as the user's education, religion and children.

In Block 105 the user enters enroute data. The enroute data
includes information relating to music, entertainment, sports,
5   services, restaurants, and shopping. In Block 107 the user
enters information regarding the users favorites.

If, however, the user selects a preselected profile in Block
101, then in Block 111 the process displays a list of default
profiles. The default profiles are profiles for which data has
10   previously been provided. In one embodiment, the data for the
default profile is standardized based on age group and sender.
For example, college age males have one default profile with
standardized information, and male senior citizens have a
different default profile with different standardized
15   information. In Block 113 the user selects a default profile.

If in Block 101 the user selects a clone type profile, in
Block 121 the process displays a list of existing profiles. FIG.
6 illustrates a screen showing existing profiles for a user. As
illustrated, the user has five profiles. The profiles include a
20   default profile 60, an entertainment profile 62, a business
profile 64, a shopping profile 66, and a vacation profile 68. For
each of the profiles, the user is provided a choice of editing
the profile via an edit button or cloning the profile via a clone
button.

25   FIG. 7 illustrates a clone profile screen. The clone
profile screen allows for data entry of the profile name 80 and
user information 82, as well as modification of the enroute
profile 84 and favorites 86. Thus, a clone profile is a copy of
a preexisting profile, which may be then edited.

30   Similarly, FIG. 8 illustrates the result of selecting the
edit button of the screen of FIG. 6. As with the clone profile
of FIG. 7, via the profile screen allows for edit of the profile
information 90, the enroute profile 92, and favorites 94.

FIG. 9 illustrates a flow chart of a process for populating
35   a database. In Block 901 the process determines the method to

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1   be used in populating the database. The database may be populated either based on locations at which the PCD becomes relatively immobile, through selection of a route, or through selection of an area.

5   If the stop, or mobility, method is selected the process proceeds to Block 903. In Block 903 the process determines if the PCD has stopped. The PCD is determined to have stopped if the PCD has moved over 500 feet within the past two minutes, but has moved less than 50 feet in the past minute. If the PCD has

10   stopped the process in Block 905 determines the position, in one embodiment the latitude and longitude, of the stop location and transmits the position to the server. The server in turn responds with an indication of the address of the stop location, as well as any identifying information regarding that address such as

15   phone number, name of business, or other pertinent information. In addition, optionally the process provides an input screen to allow the user to enter additional information. An example input screen is illustrated in FIG. 13. The input screen includes a name field 1301, and add information button 1303, and a tag

20   button 1365. Once the information has been either received from the server and/or input by the user, the PCD places a request with the server in response to selection of the tag button to store the information in the user's personal database. The process thereafter returns.

25   If in Block 901 the process determines that the select route method has been selected the process proceeds to Block 907. In Block 907, the process determines the selected route. The route is selected by the user through scrolling of an icon across a map display. The locations corresponding to the map locations form

30   the route selected by the user. In alternative embodiments, the PCD determines the route using the standard algorithms known in the art based on the starting point/ending point calculations. In further alternative embodiments, the PCD provides a server a starting point and an ending point, and the server determines the

35   route. The server then provides route information to the PCD.

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1   In Block 909 the process determines a series of locations corresponding to locations along the selected route. Once the process has determined the locations corresponding to locations along a selected route the process proceeds to Block 910, in

5   which the process, as previously described, retrieves and stores data into the database.

If in Block 901 the process determines that the select area method has been selected, the process proceeds to Block 911. In Block 911 the process determines the selected area. The area is

10   selected by the user through use of a click and drag box on a map display. The process also determines locations corresponding to those within the click and drag box. The process then proceeds to Block 913. As previously described with respect to previously discussed Blocks, in Block 913 the process receives information

15   regarding locations corresponding to the selected area, and stores the information in the database. The process then returns.

FIG. 10 illustrates a display screen showing a navigation page of the present invention. The display screen provides an

20   indication of the selected profile 1011, which as illustrated is a San Diego(SD) vacation profile. The screen display also includes a map display 1013. The map display includes a current destination D1 and a final destination D2. The map display also includes an indication of items 1015a-c from the favorite menu

25   within the map display.

The display also includes selection boxes for determining a method of transportation 1017. The embodiment described eight methods of transportation are selectable. The eight methods of transportation are by foot (PED), by air, by water, by rail, by

30   highway, by subway, by bike and by horse. The method of transportation effects both routes and time of travel. For example, subways have specific locations from which one may ingress and egress, and those locations must be taken into account when route selection occurs. In addition, the method of

35   transportation also affects travel time. For example, traveling

1   from one place to another by foot is likely, depending on
    traffic, to take longer than travel by car.

        In one embodiment in the present invention, route selection
    is also affected by the use of road blocks. Road blocks are
5   locations, selected by the user, which are to be avoided in the
    selection of many routes. Road blocks may be selected by the
    user, for example, to avoid areas the user, through personal
    preference or knowledge, wishing to avoid. For example, a user
    may desire to avoid certain intersections known the user to
10 present particular difficulties with travel. Road blocks may also
    be selected by the user to avoid areas which the user may believe
    to present danger to the user or the user's property. These areas
    may be areas of high crime, construction zones, or even areas
    which are known to the user to present dangerous road driving
15 conditions. In addition, for an automatically selected route, in
    one embodiment of the invention the user is provided the
    opportunity to place road blocks along the selected route.

        Road blocks are illustrated in FIG. 11. FIG. 11 illustrates
    a user road blocks display screen. The user road blocks display
20 screen includes an automatically selected route to the first
    destination D1 and a final destination D2. The automatically
    selected route is indicated by a bold line 1111 in the map
    display. Along each intersection or along the selected route a
    selectable button 1113 is displayed. If the user selects the
25 button the process implements a road block at the selected
    location and automatically reselects a route to avoid the road
    block location.

        In addition, as illustrated in FIG. 11 the user is provided
    a selection box 1117 to allow selection of certain types of
30 activities more likely to impact traffic. As illustrated, the
    selection include entertainment, sports, conventions and parades.
    Selection of any of these items causes the process to determine,
    based on information available from the Internet service
    provider, whether such locations should be avoided.

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1   FIG. 12 illustrates an enroute profile setting screen. The enroute profile setting screen provides two functions. A first function is to allow a user to set favorite settings for any particular profile. Accordingly, the screen includes a profile

5   pop down menu 1211 allowing selection of a particular profile. The screen also includes button entries for categories corresponding to those which appear in the favorite profiles. Thus, button menus for music 1213, entertainment 1215, recreation 1217, restaurants 1219, miscellaneous 1221, shopping 1223, sports

10   1225, and services 1227 are provided. Each of the categories allow for selection of multiple items corresponding to the favorites of the user for the particular profile. For example, under the restaurants categories the groupings include those for fast food, Italian food, French food, American food, and Chinese

15   food. The user may select one or more of these groupings.

       Each of the selected groupings are available for automatic database population. For example, if a database is populated either through simulation or through actual route travel, database population is limited to those corresponding to

20   groupings selected via the enroute profile settings. In other words, users are provided information relating to items which are of interests to them along the route they expect to take. This allows both for increased targeting of information by businesses, which will make themselves known to individuals who may be

25   interested in their product or service, as well as allowing those individuals to filter out information relating to businesses and services for which they have no interest.

       As additionally indicated in the screen of FIG. 12, users may elect to turn off population of the database via a button

30   menu 1231. This allows the user to avoid excessively populating the database in areas the user either will not return to or does not expect to stop. Moreover, a pop down selection also is provided in the screen of FIG. 12 to allow the user to populate the database enroute or merely for the destination 1235.

35   Population of the database enroute allows the user to locate

1   items of interest or traveling for which the user may desire to
     stop.   If the user knows that the user will not stop prior to
     reaching the destination, then the user may elect the destination
     button and thereby only be provided information regarding the
5   users destination.

          FIG. 13 illustrates a screen used by the user to tag a
     location.   The tag location screen allows the user to populate
     a database based on either current location or an address located
     on their map.   The tag location screen is used when the user is
10   either at a location or knows of a location for which the user
     desires the information entered into the database.   The tag
     location screen is also provided when the user is populating the
     database via the stop method, and the user has additional
     information desired to be entered.   This may occur for example,
15   when a particular business is not provided information to the
     ISP, but the user wishes information provided by way of the user
     entry into the database.

          FIG. 14 illustrates a block diagram of a central music
     system.   A central music system 1411 is a computerized system
20   including a processor and memory.   The central music system
     additionally includes a modem for communication over a telephone
     network.   In other embodiments, as those skilled in the art will
     recognize, the modem may be replaced by a network interface card
     (NIC) or a cable modem, or other similar devices depending on the
25   communication transport system.

          The memory stores information in digital form, including
     audio files. Audio files are files which, when decoded by a
     suitable player, form an audio output stream which may be the
     reading of a book or, for example, music.   The audio files store
30   music in a variety of formats.   These formats include .MP3 files,
     .wav files, .aud files, and the like.   An .MP3 file is a
     compressed audio file.   The audio files are obtained by
     transferring the audio files from an external system to the
     central music system.   This may be done via a CD-ROM or disk
35   reader, or by using the communication modem or the like to

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1   download information representing the audio files from the
      Internet.

          In an alternative embodiment, the central music system is
      a central entertainment system. The central entertainment system
5   is provided visual files and audio visual files in addition to
      sound files.

          Once the audio file is loaded into the central music system,
      the central music system makes the audio file available to remote
      nodes. As illustrated in FIG. 14, the remote nodes include an
10   automobile 1413, a first home system 1415, and a second home
      system 1417. The central music system transfers the music files
      to the requesting remote node on request. As illustrated, the
      first home system and the second home system are connected to the
      central music system via a physical link.   The automobile,
15   however, is connected to the central music system via a cellular
      phone.

          The central music system transmits the audio file to the
      requesting node in the format requested by the requesting node.
      For example, the first home system may require audio files of a
20   first type and the second home system may require audio files of
      a second type. Further, the automobile sound system may require
      audio files of yet a third type. The audio files stored on the
      central music system, however, may be of yet a fourth type.
      Thus, the central music system includes a file translation
25   program. The file translation program converts audio files from
      one file format to another.

          FIG. 15 illustrates a process of using the central music
      system. In block 1511 the central music system downloads or
      installs an audio file. This occurs in the case of a download
30   by downloading the audio file from another computer system, such
      is accomplished by downloading from the Internet. Audio files
      may also be installed onto the central music system through use
      of a disk or CD-ROM drive.

          In block 1513 a central music system organizes the audio
35   files. The organization of audio files is accomplished at the

1   direction of a user. For example, the user may link audio files such that a request for a first audio file will additionally inform the music system that a second audio file should follow the first audio file.

5   In block 1515 the central music system processes a request for an audio file. In processing the request for the audio file the central music system determines which audio file has been requested, as well as any linked audio files additionally requested.

10   In block 1517 the central music system determines if any of the audio files require translation to a different format. If translation of audio files from one format to another format is required the process proceeds to block 1519. In block 1519 the process translates the audio files. After performing any operations relating to translation, the process proceeds to block 1521 and provides the audio files, in the proper format, to the requesting node.

Accordingly, the present invention provides a computer navigation and media control center. Although these inventions have been described in certain specific embodiments many additional modifications and variations would be apparent to those skilled in the art. It is therefore to be understood that this invention may be practiced otherwise than as specifically described. Thus, the present embodiments of the inventions should be considered as illustrative and not restrictive, the scope of the inventions to be indicated by claims and their equivalents supported by this application rather than the foregoing description.

1   CLAIMS

1.   A method of populating a database comprising:
determining a tag location;

5   requesting information concerning the tag location; and
providing the information to a computer system having a
database residing in a memory.

2.   The method of populating a database of claim 1 wherein

10   determining a tag location comprises:
evaluating the position of a GPS capable device;
waiting a preselected time period;
reevaluating the position of the GPS capable device; and
determining if the position of the GPS capable device

15   before and after waiting the preselected time period is
substantially the same.

3.   The method populating a database of claim 1 wherein
determining a tag location comprises:

20   presenting a map display using a computer to a user;
receiving a selected position on the map display.

4.   The method of populating a database of claim 1 wherein
the tag location comprises a plurality of locations.

25

5.   The method of populating a database of claim 4 wherein
the tag location comprises a selected area.

6.   The method of populating a database of claim 5 wherein

30   requesting information concerning the tag location comprises:
formatting a request identifying the selected area to a
server computer system; and
communicating the request identifying the selected area to
the server computer system.

35

-17-

1   7.   The method of populating a database of claim 6 wherein determining a tag location comprises:

           presenting a map display to a user, the map display providing for selection of an area of the display;

5   receiving an indication of an area selected on the map display.

        8.   The method of populating a database of claim 4 wherein the tag location comprises a selected area.

10

        9.   The method of populating a database of claim 5 wherein requesting information concerning the tag location comprises:

           formatting a request identifying the selected area to a server computer system; and

15   communicating the request identifying the selected area to the server computer system.

        10.   The method of populating a database of claim 6 wherein determining a tag location comprises:

20   presenting a map display to a user, the map display providing for selection of an area of the display;

           receiving an indication of an area selected on the map display.

25   11. A method of accessing data in a database using a profile, the data comprising an indication of a geographic location and information regarding the geographic location, a subset of the data being associated with the profile, the method comprising:

30   receiving a request for data from a database;

           receiving a profile identification associated with the request for data from the database;

           forming search criteria for a search of the database, the search criteria including details of the request for data

35

1   and details of a profile identified by the profile
       identification; and
       locating data fulfilling the search criteria.

5   12. The method of claim 11 wherein the profile includes
       user information.

           13. The method of claim 12 wherein the user information
       includes a user age.
10

           14. The method of claim 11 wherein the profile includes
       items identified as favorites of the user.

           15. The method of claim 11 wherein the profile includes
15   standard details.

           16. The method of claim 11 further comprising receiving a
       request for modification of details of a profile, and modifying
       the profile in response to the request for modification of
20   details of the profile.

           17. The method of claim 11 wherein each profile is
       associated with a user.

25   18. The method of claim 17 wherein multiple profiles are
       associated with a user.

           19. A method of providing information to a user based on
       the user location, comprising:
30   receiving an indication of the user location;
           determining data regarding locations approximate the user
           location; and
           providing the data to the user.

35   20. A method of modifying a planned route comprising:

1   receiving a route start point;

            receiving a route end point;

            receiving a road block location; and

            determining a route from the route start point to the route

5   end point avoiding the road block location.

            21. A method of determining a route comprising:

            receiving a route start point;

            receiving a route end point;

10   receiving a mode of transportation; and

            determining a route from the route start point to the route

            end point based on the mode of transportation.

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1   SYSTEM AND METHOD FOR USER NAVIGATION

ABSTRACT OF THE DISCLOSURE

A user profile based navigation system. The navigation
5   system stores location centric information in a database
associated with a user profile. Information from the database
is provided to users based on a selected user profile, which
modifies the types of data provided to a user at a geographic
location. Data in the database is loaded into the database
10   based on user supplied information and an indication of user
geographic location.

DMC/ej

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30

35

FIGURE 1

user1 ─31

p1 ─35

37─ user2

p2 ─36

p3 ─39

user3 ─41

p4 ─47

p5 ─45

p6 ─43

database ─33

FIGURE 2A

P1	P2	P3
23	25	27

21

FIGURE 2B

start → Create profile 61 → Populate profile 63 → return
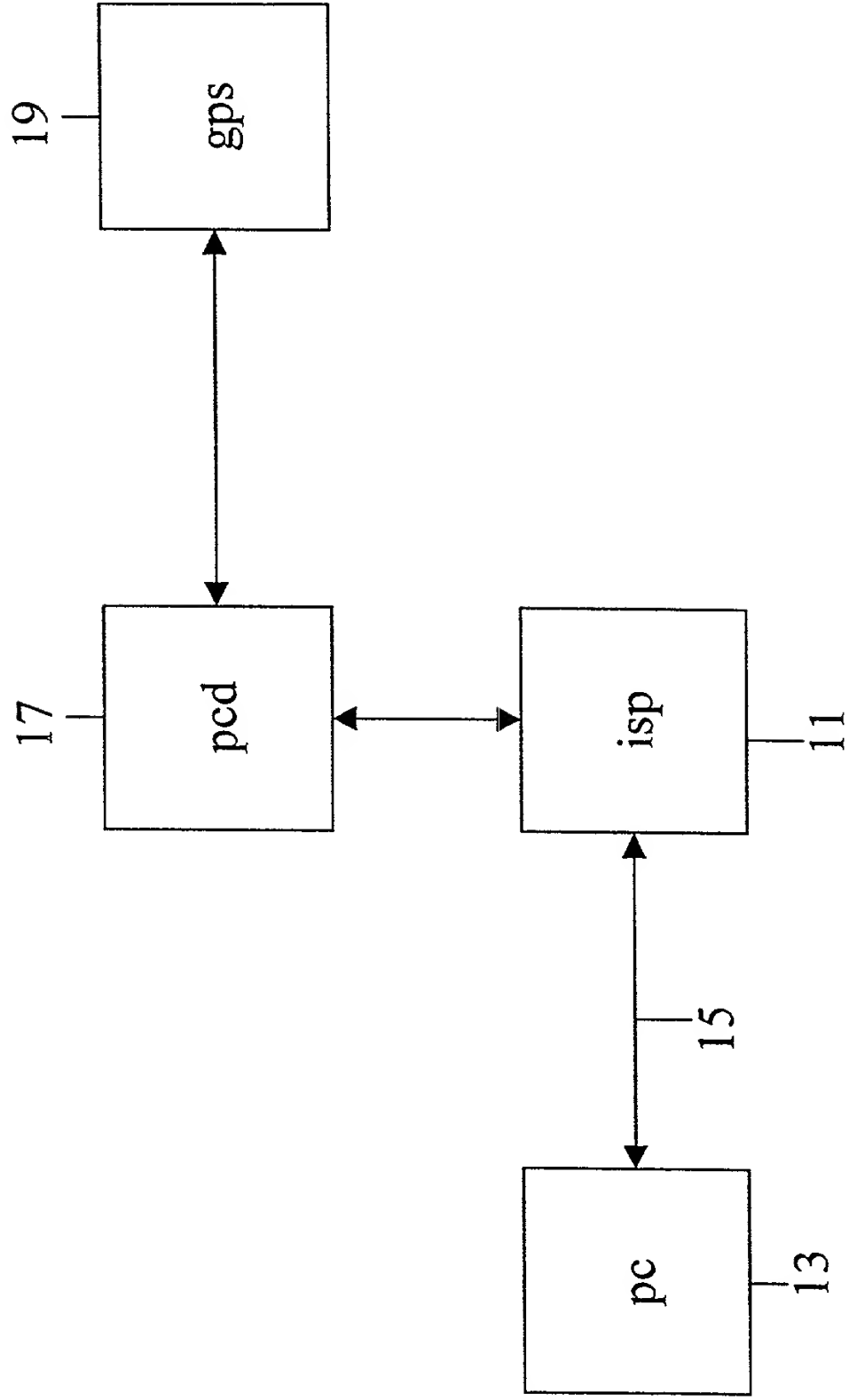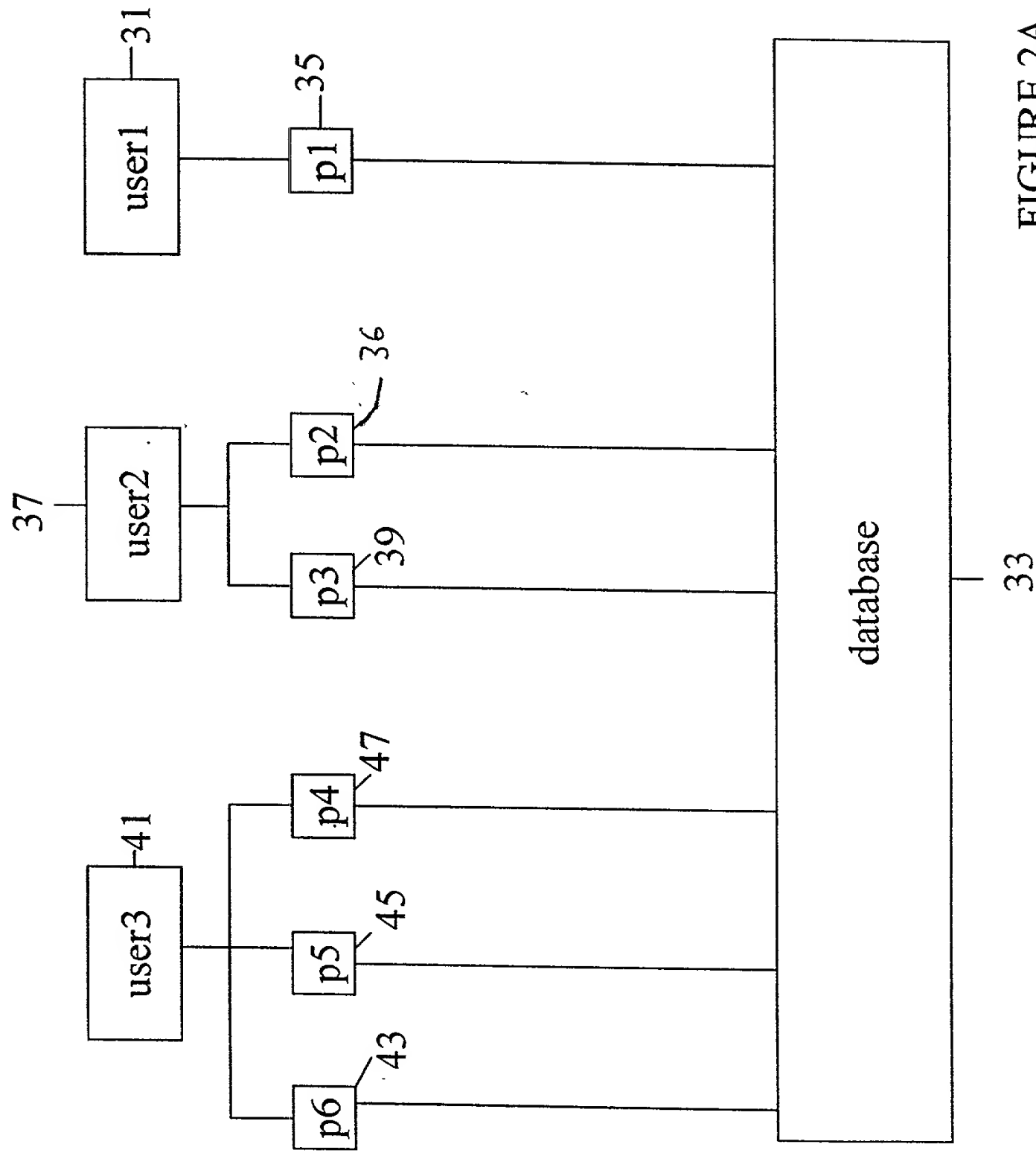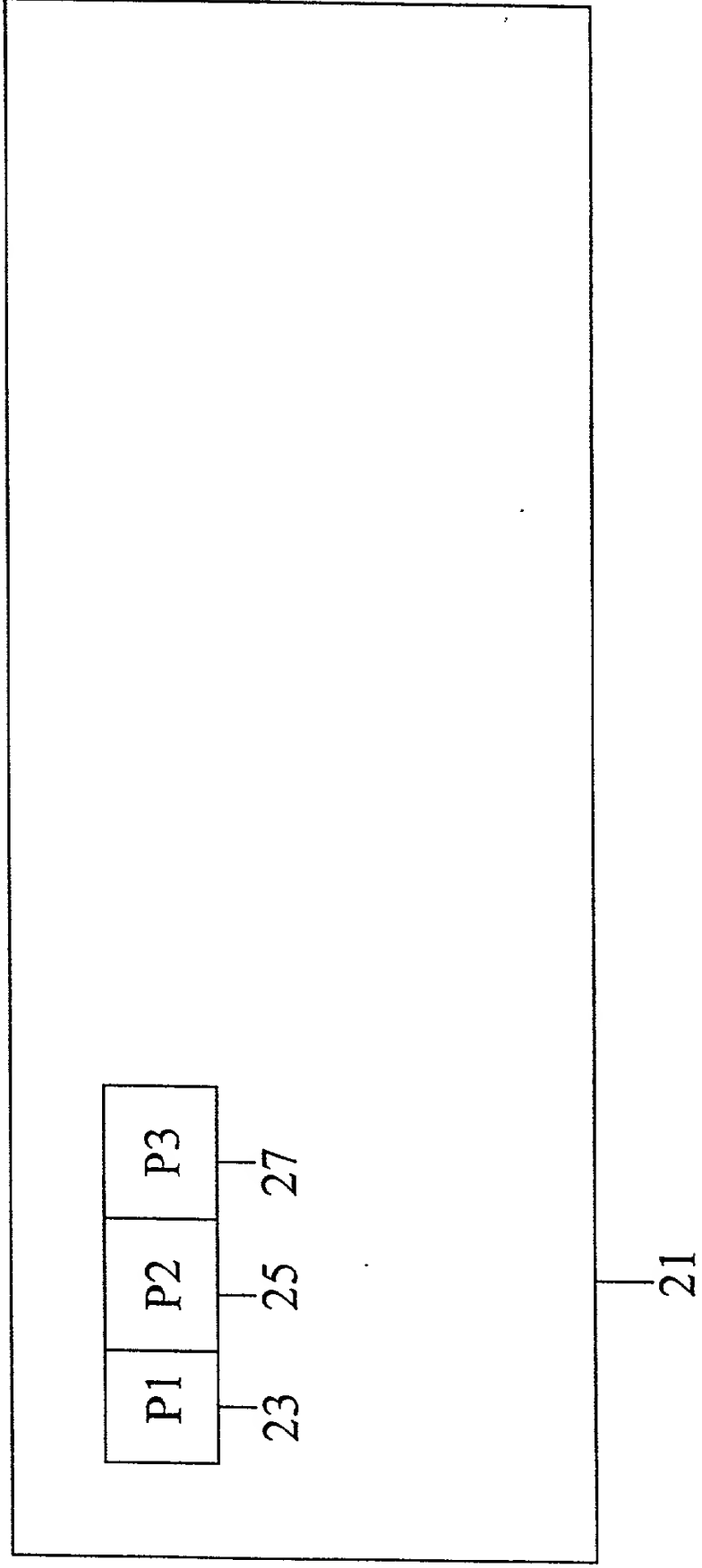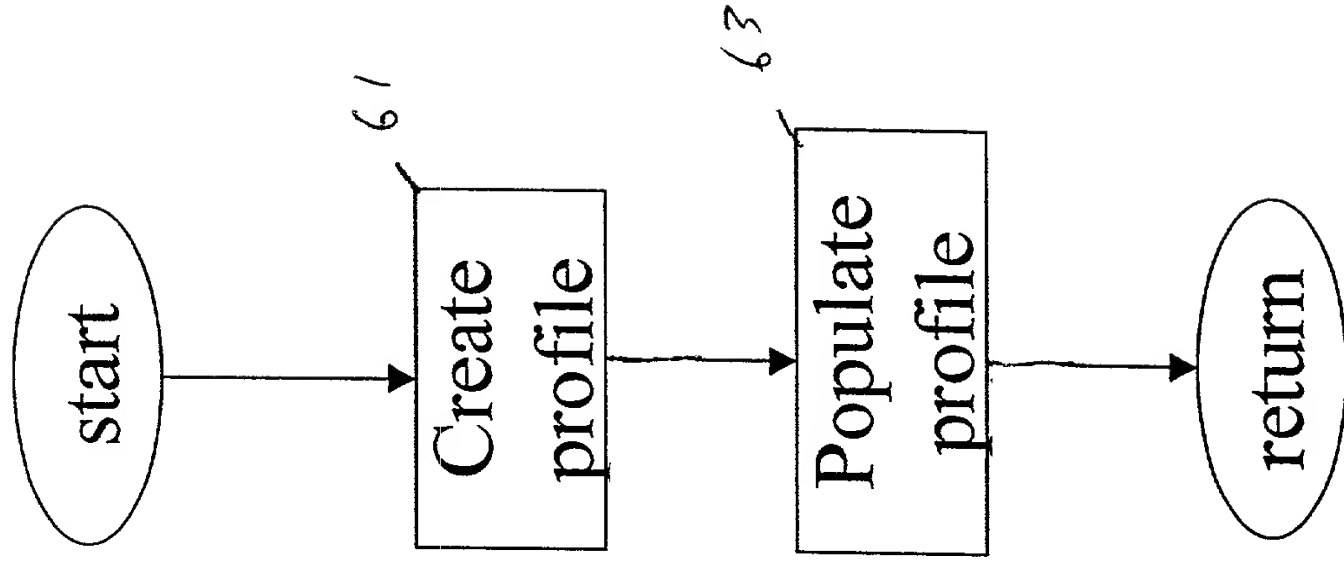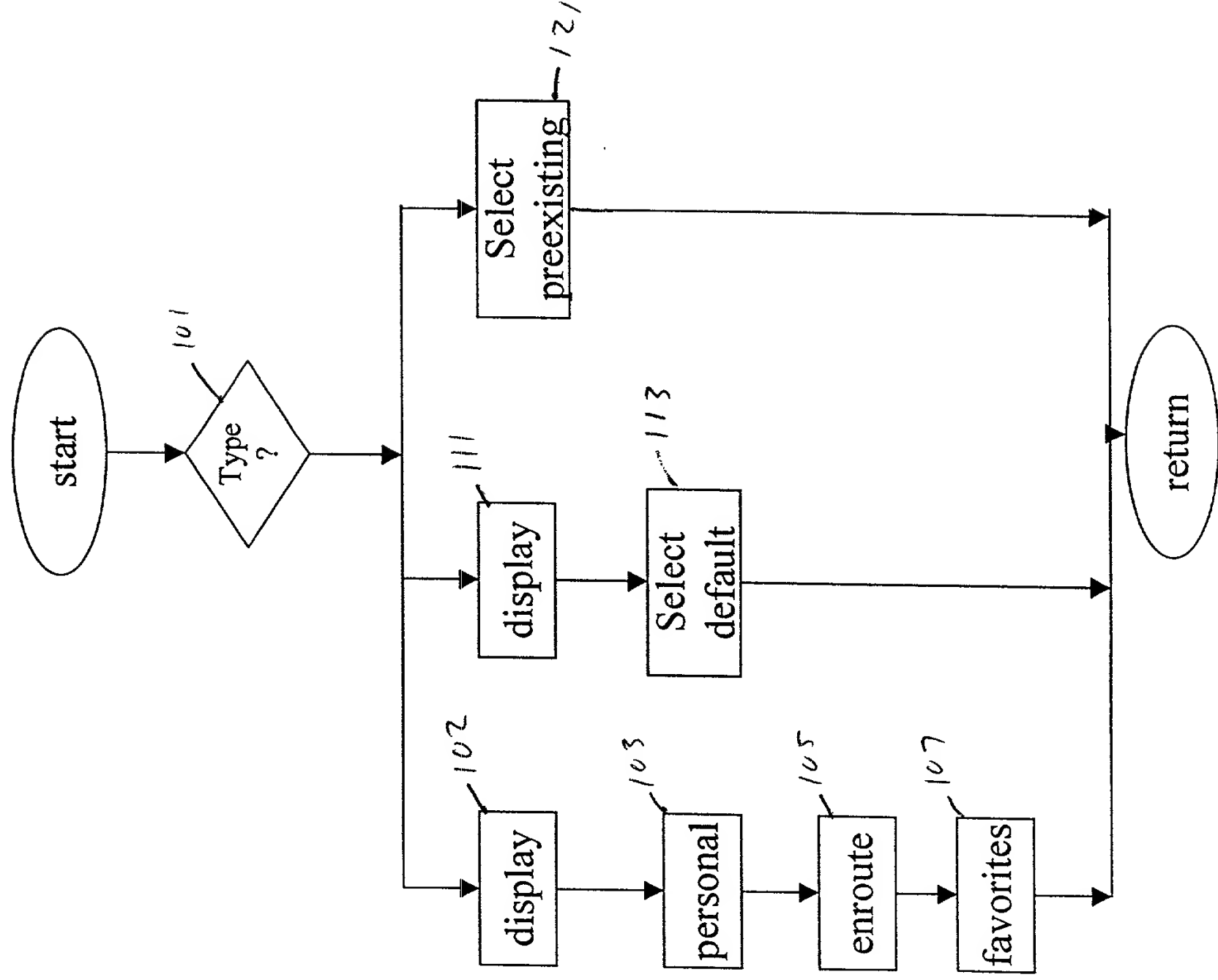
FIGURE 3

FIGURE 4

FIGURE 5

Create New Profile

(TEXT)

Profile name

Age

Sex

Marital status

Occupation

City

Education

Religion

Children

Enroute Profile

Music
Entertainment
Sports
Services
Restaurants
Shopping

Edit

All | Favorites

○ ○ ○ ○ ○ ○ ○ ○ ○

ON ● OFF   Radius

5   Miles

Edit

Submit new profile

Cancel

FIGURE 6

Profile List

Profile 1	Default	Edit	Clone
Profile 2	Entertainment	Edit	Clone
Profile 3	Business	Edit	Clone
Profile 4	Shopping	Edit	Clone
Profile 5	Vacation	Edit	Clone

60
62
64
66
68

70

72

Create New Profile   Preset profile selection

Netsite:

What's Related

FIGURE 7

Clone Profile

(TEXT)

Profile name	Vacation
Age	33
Sex	Male
Marital status	Single
Occupation	Graphic Artist
City	Mission Viejo
Education	College Diploma
Religion	None
Children	None

Enroute Profile

All	Favorites

Music
Country
Jazz
Entertainment
Movies
Country Concerts
Sports
Basket ball
Golf
Services
Automotive
Shoe repair
Restaurants
Fine dinning
Fast food

Edit

○ Home Depot
● Wells Fargo
○ Vons
○ Chevron
○ Jack in the...
○ Comp USA
○ Sportmart
○ Macy's
● Kmart

○ ON ● OFF   Radius 15 Miles

Edit

Cancel

Submit new profile

Edit Profile

(TEXT)

Profile name	Vacation
Age	38
Sex	Male
Marital status	Single
Occupation	Graphic Artist
City	Mission Viejo
Education	College Diploma
Religion	None
Children	None

Enroute Profile

Music
  Country
  Jazz
Entertainment
  Movies
  Country Concerts
Sports
  Basket ball
  Golf
Services
  Automotive
  Shoe repair
Restaurants
  Fine dinning
  Fast food

Edit

All | Favorites

O Home Depot
● Wells Fargo
O Vons
O Chevron
O Jack in the...
O Comp USA
O Sportmart
O Macy's
● Kmart

ON OFF   Radius

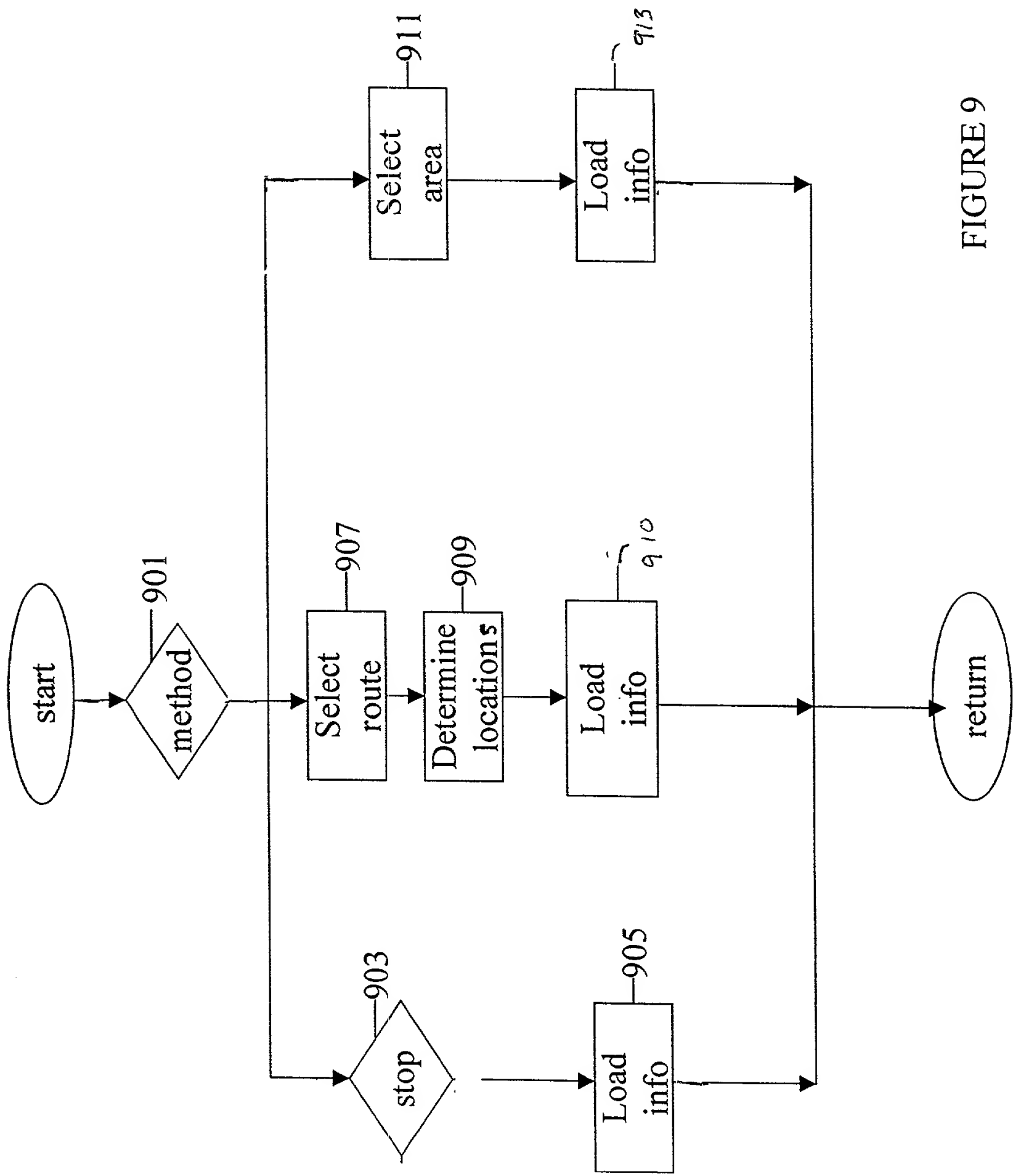Edit   15 Miles

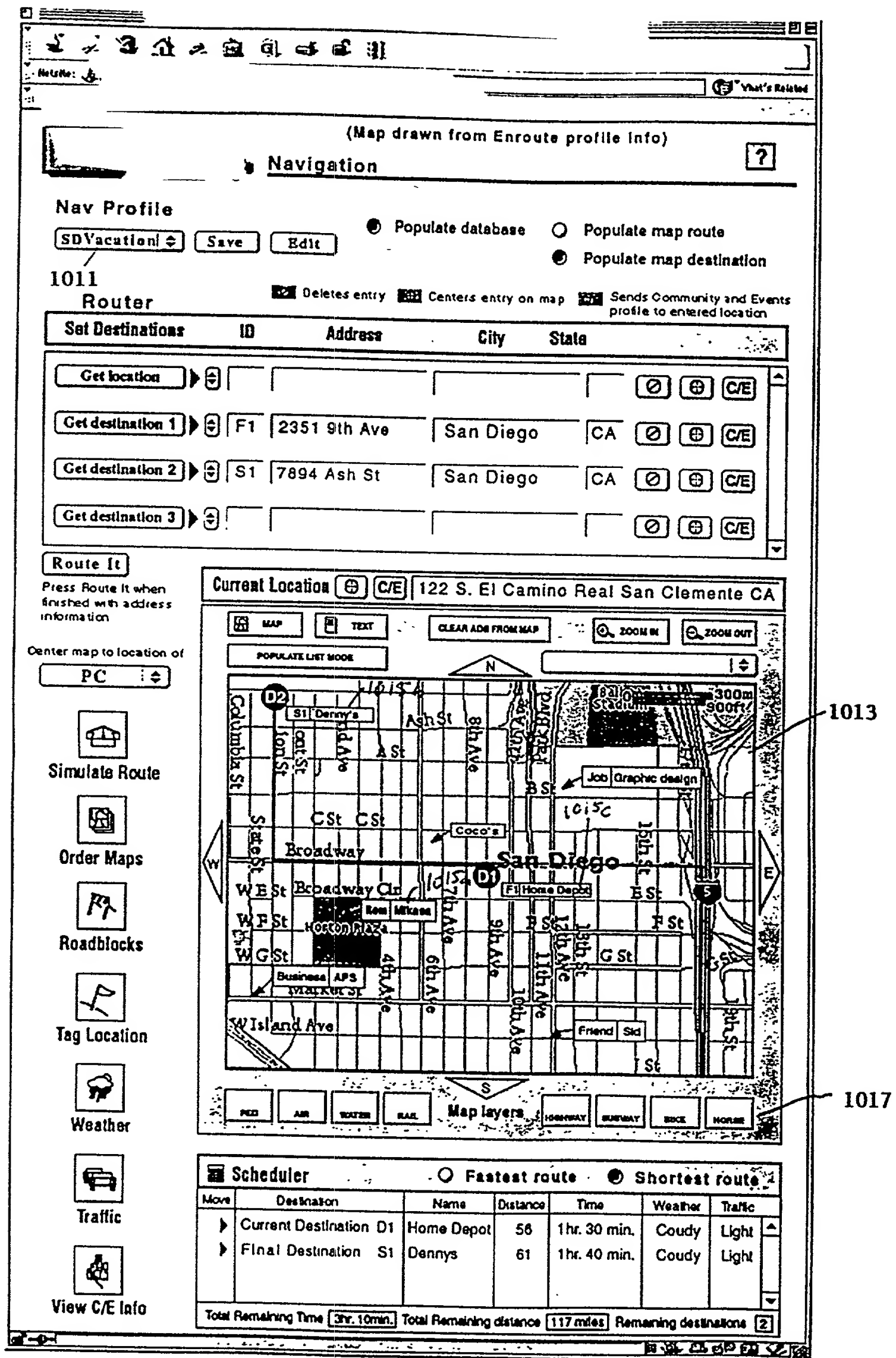Submit new profile   Cancel

FIGURE 8

FIGURE 9

(Map drawn from Enroute profile info)

↓ Navigation

[?]

Nav Profile

[SD Vacation ▼] [Save] [Edit]

● Populate database   ○ Populate map route

◑ Populate map destination

1011

Router

⊠ Deletes entry   ⊞ Centers entry on map   ⊠ Sends Community and Events profile to entered location

Set Destinations	ID	Address	City	State	
[Get location] ▶ ⊜					⊘ ⊕ C/E
[Get destination 1] ▶ ⊜	F1	2351 9th Ave	San Diego	CA	⊘ ⊕ C/E
[Get destination 2] ▶ ⊜	S1	7894 Ash St	San Diego	CA	⊘ ⊕ C/E
[Get destination 3] ▶ ⊜					⊘ ⊕ C/E

[Route It]

Press Route It when finished with address information

Center map to location of

[PC ▼]

🏠 Simulate Route

🗺 Order Maps

🛇 Roadblocks

🚩 Tag Location

☁ Weather

🚗 Traffic

👥 View C/E Info

Current Location [⊕] [C/E] 122 S. El Camino Real San Clemente CA

[⊞ MAP] [▤ TEXT] [CLEAR ADS FROM MAP] [🔍 ZOOM IN] [🔍 ZOOM OUT]

[POPULATE LIST MODE] [▼]

— 1013

— 1017

[PED] [AIR] [WATER] [RAIL] **Map layers** [HIGHWAY] [SUBWAY] [BIKE] [HORSE]

▦ Scheduler   ○ Fastest route   ● Shortest route

Move	Destination		Name	Distance	Time	Weather	Traffic
▶	Current Destination	D1	Home Depot	56	1hr. 30 min.	Coudy	Light
▶	Final Destination	S1	Dennys	61	1hr. 40 min.	Coudy	Light

Total Remaining Time [3hr. 10min.] Total Remaining distance [117 miles] Remaining destinations [2]

FIGURE 10

User Roadblocks (set to avoid area)

Click on ● section of map to add personal roadblocks

1117   Avoid:

√	All On ⬍
√	Ent.
√	Sports
√	Conven.
√	Parades

Roadblock ● Always ○ Till cancelled

on ⊕   122 S. El Camino Real San Clemente CA

🔍 ZOOM IN   🔍 ZOOM OUT

FIGURE 11

Populates database and map while enrout

Enroute Profile Settings [?]

1211 — **Profile**
Vacation | ◆ [Edit] All ● On ○ Off   ● Enroute ○ Destination — 1233 / 1235

Settings — 1231

| Populate My ● On | Profile topic ● On | Live ● | Set radius [5] miles |
| Expert Database ○ Off | chat rooms ○ Off | Saved ○ | ✓ Block ◆ |

1215   1217   ✓ City   — 1219
                                              ✓ County :ants
                                              ✓ State
                                              ✓ Zip

Music — 1213
- ○ R&B
- ○ Rap
- ○ Metal
- ○ Alternative
- ○ Progressive
- ○ Classic rock
- ○ Country
- ○ Jazz

Entertainment
- ○ Theatres-live
- ○ Theatres
- ○ Amuse. parks
- ○ Festivals
- ○ Carnivals
- ○ Concerts
- ○
- ○

Recreation
- ○ Surfing
- ○ Camping
- ○ Sking
- ○ Hiking
- ○ Minature Golf
- ○
- ○
- ○

(restaurant list)
- ...ing
- ...hop
- ○ Fast Food
- ○ Italian
- ○ Frinch
- ○ American
- ○ Chinese
- ○

Miscelaneous — 1221
- ○ Stadiums
- ○ Rest stops
- ○ Chirches
- ○ Hospitals
- ○ Auto dealers
- ○ Equestrian
- ○ Points of Int.
- ○

Shopping
- ○ Dept. Stores
- ○ Antiques
- ○ Mall
- ○ Outlet
- ○
- ○
- ○

Sports
- ○ Tinnis
- ○ Football
- ○ Baseball
- ○ Basket Ball
- ○ Hockey
- ○ Nascar
- ○ Boxing
- ○ Soccer

Services
- ○ Hotel/motels
- ○ Automotive
- ○ Rental cars
- ○ Airline
- ○ Government
- ○ Delivery
- ○ Grocers
- ○ Banks

1223   1225   1227

Friend Finder — Enter name — Enter address — Enter PCO number

Friend 1	Sid Johnson	231 Island San Diego CA	
Friend 2			
Friend 3			

Business Finder — Enter name of business — Enter address

Business 1	APS Design	543 Market St. San Diego CA
Business 2		
Business 3		

Job-Finder — Enter title of employment you are looking for

Job title 1	Graphic design
Job title 2	
Job title 3	

Item Finder — Enter name/brand of item of item you want to locate

Item 1	Mikasa
Item 2	
Item 3	

[Submit]

FIGURE 12
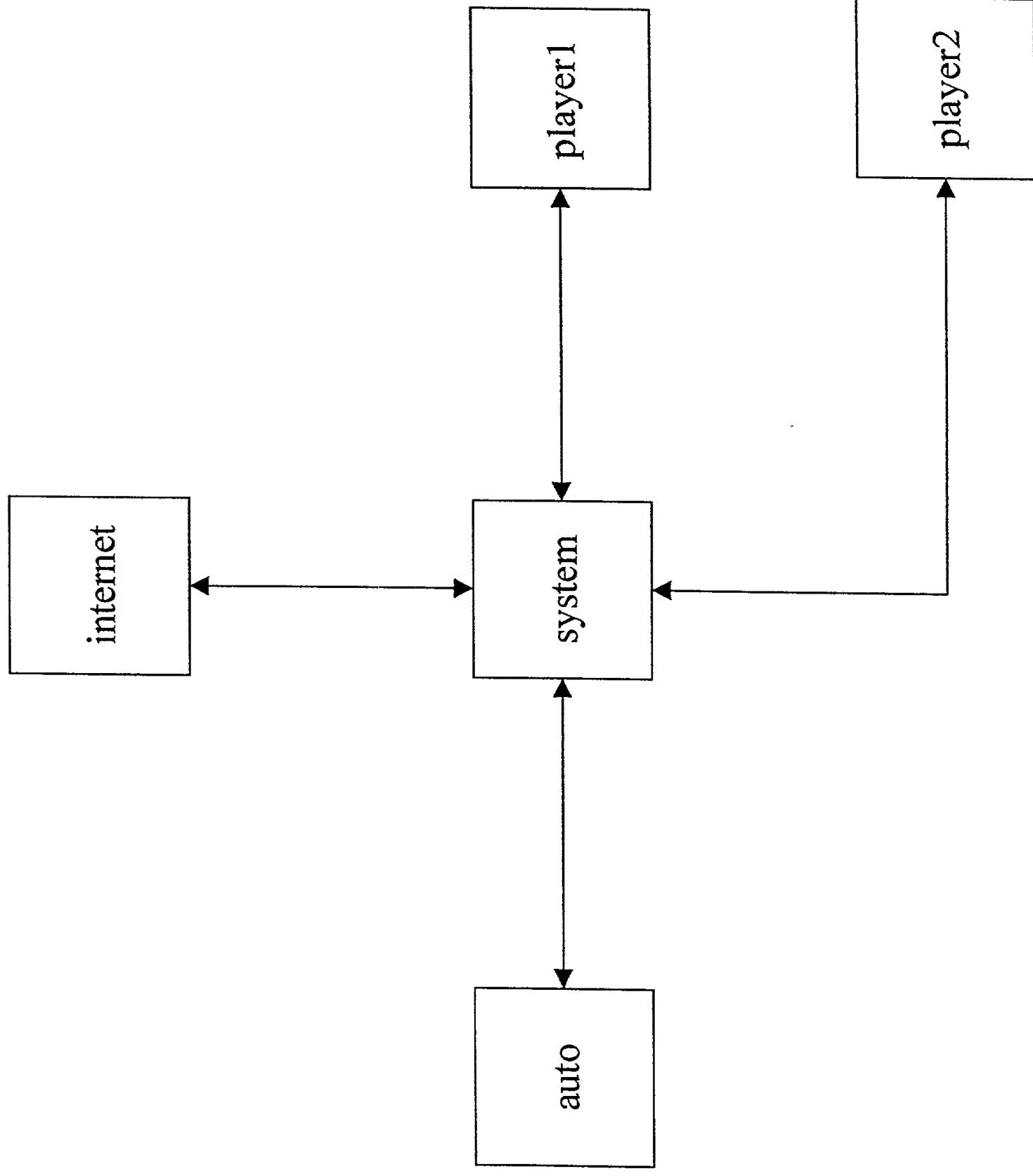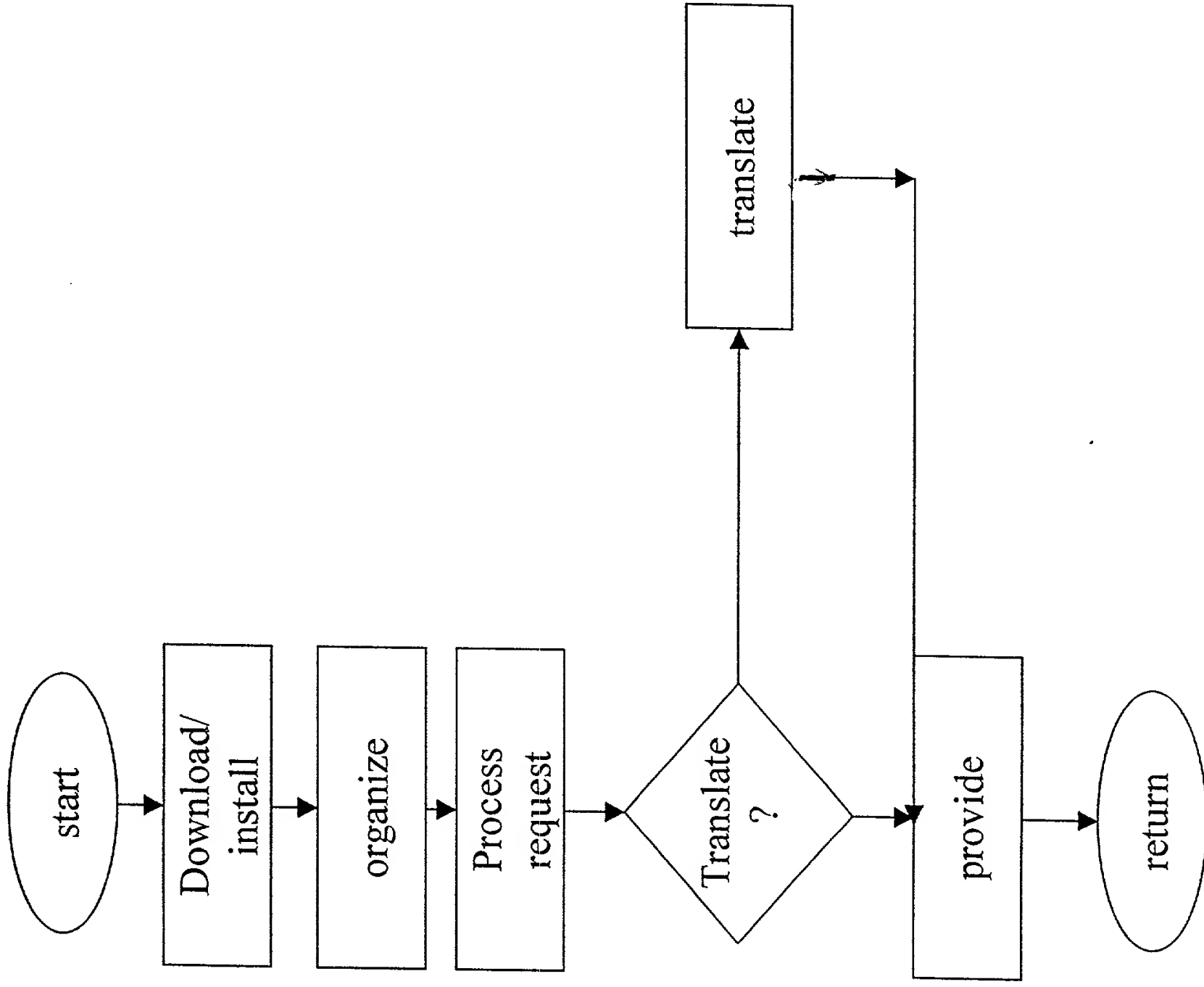
Tag Location

Enter name and press Tag to tag current location

| 122 S. El Camino Real San Clemente CA | ⊕ |

T7 | | Tag | Add Info

To tag another location enter address and press find. Once address is found enter name and press Tag.

| 253 main st. Houston TX | Find |

T7 | | Tag | Add Info

ZOOM IN   ZOOM OUT

FIGURE 13

FIGURE 14

FIGURE 15

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled SYSTEM AND METHOD FOR USER NAVIGATION, the specification of which is attached hereto unless the following is checked:

__ was filed on __ as United States Application Number or PCT International Application Number __ and was amended on ___ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of the foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

Application Number   Country   Filing Date (day/month/year)   Priority Claimed

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

Application Number   Filing Date

60/161,860   October 27, 1999

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application:

Application Number   Filing Date   Patented/Pending/Abandoned

POWER OF ATTORNEY: I hereby appoint the following attorneys and agents of the law firm CHRISTIE, PARKER & HALE, LLP to prosecute this application and any international application under the Patent Cooperation Treaty based on it and to transact all business in the U.S. Patent and Trademark Office connected with either of them in accordance with instructions from the assignee of the entire interest in this application;

or from the first or sole inventor named below in the event the application is not assigned; or from __ in the event the power granted herein is for an application filed on behalf of a foreign attorney or agent.

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I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first joint inventor	Inventor's signature	Date
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DMC:nml
NML PAS282459.1-*-10/27/00 4·56 PM